

Catalogue of American Amphibians and Reptiles.

Glor, R.E., R. Powell, and J.S. Parmerlee, Jr. 1998. *Cyclura ricordii*.

Cyclura ricordii* (Duméril and Bibron)*Ricord's Ground Iguana**

Aloponotus Ricordii Duméril and Bibron 1837:190. Type locality, "Saint-Domingue." Holotype, Muséum National d'Histoire Naturelle, Paris (MNHN) 8304, a mounted adult collected by A. Ricord, date of collection unknown (not examined by authors).

Hypsilophus Ricordii: Fitzinger 1843:54.

Aloponotus Ricardi: Gray 1845:187. *Lapsus*.

Metopoceros cornutus: Boulenger 1885:188 (part; not of Bonnat 1789). See Remarks.

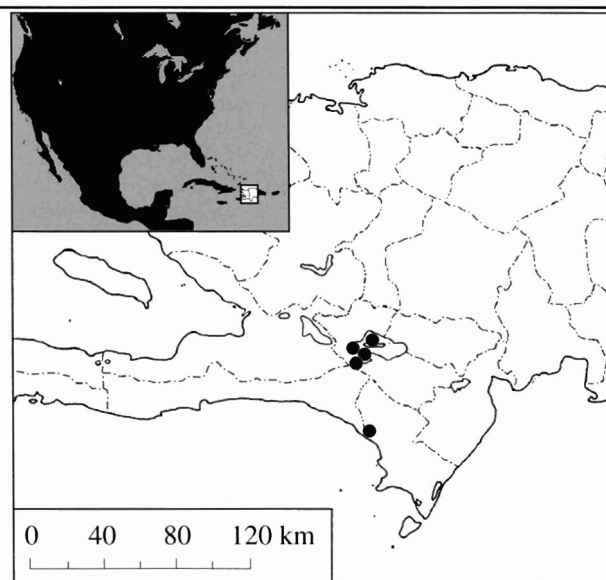
Cyclura ricordii: Cochran 1924:5. First use of present combination.

Cyclura ricordi: Schwartz and Thomas 1975:113.

Cyclura ricordi: Valdez Sierra and Mateo Félix 1992:46. *Lapsus*.

• **Content.** No subspecies are recognized.

• **Definition.** *Cyclura ricordii* is a large iguana (maximum SVL of females to 365 mm, of males to 460 mm). Head scalation is as follows: nasals always in contact with each other, with the rostral, and with the postnasal; no obvious row of scales between sublabials and infralabials; frontal scale not obviously enlarged and separated from the interparietal by 7–11 (mode 8) scale rows; first prefrontal never in contact with the precanthal; anterior canthals separated by 9–17 (mode 12) scales; a row of suboculars continues posteriorly to form a series of supratympanic scales; suboculars number 16–20 (mode 17) to the anterior border of the tympanum; several rows of small scales occur between the suboculars and supralabials. The tympanum is large



Map. Range of *Cyclura ricordii* (modified from Schwartz and Henderson 1991). The type-locality is too imprecise to plot.

and elliptical. The total of 51–78 dorsal crest scales between the occiput and the first caudal verticil can be subdivided in the following fashion: 11–21 between occiput and shoulder; 31–43 between shoulder and sacrum; and 7–18 between sacrum and first caudal verticil. The dorsal crest scales on the neck usually are longer than those on the body. Caudal verticils are very conspicuous and are composed of pronounced spiny scales. Femoral pores are found in a single row and number 28–46. Counts and measurements are composites taken from Schwartz and Henderson (1991) and from T.A. Wiewandt and D.F. Gicca (unpubl. data), and are based on 37 and 20 specimens, respectively.



Figure. An adult male *Cyclura ricordii* from Isla Cabritos, Lago Enriquillo, Provincia de Independencia, República Dominicana.

The dorsal pattern consists of 5–6 pale gray chevrons on a ground color that ranges from brown to gray. Five of these chevrons continue onto the slightly lighter ventral surface, where they form bold narrow lines. The chevrons are retained by adults, but are much more distinct on juveniles. A large black patch is often observed on the forelimb. The irises are deep red in color.

• **Diagnosis.** *Cyclura ricordii* may be distinguished from congeners by the following combination of characteristics: no distinct row of scales between infralabials and sublabials, noticeably enlarged scales at each caudal verticil, and a lack of enlarged frontal or prefrontal scales on the snout.

• **Descriptions.** In addition to the original description by Duméril and Bibron (1837), others may be found in Gray (1845), Cochran (1924, 1941), Schwartz and Carey (1977), and Schwartz and Henderson (1991). Iverson (1980) described the morphology of the gastrointestinal tract and Böhme (1988) described hemipenial morphology.

• **Illustrations.** Duméril and Bibron (1837) provided a color plate of the holotype. Line drawings illustrating dorsal and lateral head scalation are in Cochran (1941) and Schwartz and Carey (1977). Noble (1923) included a black and white photograph of an adult from Isla Cabritos. A photograph of an adult *Cyclura ricordii* lying next to an adult *C. cornuta cornuta* is in Duval (1976). Sanlley Castro and Duval (1979) included a photograph of a juvenile. Gabris (1994) included a photograph of an adult.

• **Distribution.** A Hispaniolan endemic, this species is known only from the Península de Barahona south of the Sierra de Baoruco and in the Valle de Neiba, including Isla Cabritos in Lago Enriquillo. All known localities are in the República Dominicana. Schwartz and Carey (1977) suggested that *Cyclura ricordii* may also occur in the Plaine de Cul de Sac of Haiti. The range was illustrated in Schwartz and Henderson (1991).

Schwartz (1980), in a discussion of the origins of Hispaniolan amphibians and reptiles in regard to the North and South paleo-islands, listed *C. ricordii* as a species “of unknown relationships.” He indicated that specimens from the Península de Barahona suggested a South Island origin, but that these lizards originally could have occupied the xeric southern shore of the North Island and subsequently invaded the South Island. He concluded that “too little is known of its total distribution to be certain of its affinities.”

• **Fossil Record.** None.

• **Pertinent Literature.** Noble (1923) noted the appearance of the burrows and commented on the abundance of these animals on Isla Cabritos in Lago Enriquillo. Etheridge (1965) examined *C. ricordii* and other congeners in describing the abdominal skeleton of *Cyclura* and comparing it to other iguanids. Ma and Fisher (1971) included this species in a study of adenosine deaminases. Aspects of natural history are described briefly by Carey (1975) and Schwartz and Carey (1977). Iverson (1982) listed this species among those with specializations for herbivory. Tables relating the nesting patterns and aggressive displays of *Cyclura ricordii* to other iguanids can be found in Wiewandt (1982) and Carpenter (1982), respectively. de Queiroz (1987) mentioned osteological and meristic traits in relation to other iguanids. SEA/DVS (1990b) provided an index to habitats in the Dominican Republic.

Captive management and/or conservation are addressed in the following: Burghardt and Rand (1982), Duval (1976), Gabris (1994), Ottenwalder (1979, 1994a, b), Sanlley Castro and Duval

(1979), SEA/DVS (1990a, b), Slavens and Slavens (1992, 1993), Valdez Sierra and Mateo Félix (1992), and Vifias Roman (1979) (see also Remarks).

The species is included in checklists, guides, and keys by Barbour (1930, 1935, 1937), Boulenger (1885), Cope (1885), Fitzinger (1843), Gray (1845), Etheridge (1982), Henderson and Schwartz (1984), Henderson et al. (1984), Hoppe (1989), Powell et al. (1996), Schwartz and Henderson (1985, 1988), and Schwartz and Thomas (1975).

• **Etymology.** The name *ricordii* is a patronym honoring Alexandre Ricord, who collected the holotype.

• **Remarks.** Boulenger (1885) placed *Aloponotus ricordii* Duméril and Bibron (1837), *Hypsilophus (Aloponotus) ricordii* Fitzinger (1843), and *Aloponotus ricordi* Gray (1845) in the synonymy of *Metopoceros cornutus* (Bonnaterre 1789) and, in the process, misspelled each name.

Cyclura ricordii, like all species in the genus, is listed as endangered in CITES Appendix I; this designation indicates that the species is in imminent danger of extinction throughout its range. Burghardt and Rand (1982) characterized the species as “common, but threatened.” Gabris (1994) suggested that the mongoose and feral cats might be responsible for high juvenile mortality and that illegal exportation and hunting (by locals) threatens adults as well.

The common name used here was that proposed by Frank and Ramus (1995).

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Literature Cited

- Barbour, T. 1930. A list of Antillean reptiles and amphibians. *Zoologica* (N.Y.) 11:61–116.
- . 1935. A second list of Antillean reptiles and amphibians. *Zoologica* (N.Y.) 19:77–141.
- . 1937. Third list of Antillean reptiles and amphibians. *Bull. Mus. Comp. Zoöl.* 82:77–166.
- Böhme, W. 1988. Zur Genitalmorphologie der Sauria: funktionelle und stammesgeschichtliche Aspekte. *Bonner Zool. Monogr.* (27):1–176.
- Bonnaterre, P.J. 1789. *Erpétologie*. In Vol. 1, *Tableau Encyclopédique et Méthodique des Trois Règnes de la Nature*. Panckoucke, Paris.
- Boulenger, G.A. 1885. Catalogue of the Lizards in the British Museum (Natural History). Vol. 2. Trustees of the British Museum, London.
- Burghardt, G.M. and A.S. Rand. 1982. Conservation and management, p. 391–396. In G.M. Burghardt and A.S. Rand (eds.), *Iguanas of the World: Their Behavior, Ecology, and Conservation*. Noyes Publ., Park Ridge, New Jersey.
- Carey, W.M. 1975. The Rock Iguana, *Cyclura pinguis*, on Anegada, British Virgin Islands, with notes on *Cyclura ricordii* and *Cyclura cornuta* on Hispaniola. *Bull. Florida State Mus.* 19:189–234.
- Carpenter, C.C. 1982. The aggressive displays of iguanine lizards, p. 215–231. In G.M. Burghardt and A.S. Rand (eds.), *Iguanas of the World: Their Behavior, Ecology, and Conservation*. Noyes Publ., Park Ridge, New Jersey.
- Cochran, D.M. 1924. Notes on the herpetological collections made by Dr. W.L. Abbott on the island of Haiti. *Proc. U.S. Natl. Mus.* 66(6):1–15.
- . 1941. The herpetology of Hispaniola. *Bull. U.S. Natl. Mus.* 177:vii + 398 p.

- Cope, E.D. 1885. The large iguanas of the Greater Antilles. *Amer. Nat.* 19:1005–1006.
- de Queiroz, K. 1987. Phylogenetic systematics of iguanine lizards: a comparative osteological study. *Univ. California Publ. Zool.* (118):xii + 203 p.
- Duméril, A.M.C. and G. Bibron. 1837. *Erpétologie Générale ou Histoire Naturelle Complète des Reptiles*. Vol. 4. *Libr. Encyclop. Roret*, Paris.
- Duval, J. 1976. Las iguanas Dominicanas. *Zoodom*, Santo Domingo 1(1):19–23.
- Etheridge, R. 1965. The abdominal skeleton of lizards in the family Iguanidae. *Herpetologica* 21:161–168.
- . 1982. Checklist of the iguanine and Malagasy iguanid lizards, p. 7–37. *In* G.M. Burghardt and A.S. Rand (eds.), *Iguanas of the World: Their Behavior, Ecology, and Conservation*. Noyes Publ., Park Ridge, New Jersey.
- Fitzinger, L. 1843. *Systema Reptilium*. Fasciculus Primus. Amblyglossae. Braumüller and Seidel, Vindobonae (=Vienna).
- Frank, N. and E. Ramus. 1995. *A Complete Guide to Scientific and Common Names of Reptiles and Amphibians of the World*. NG Publ., Inc., Pottsville, Pennsylvania.
- Gabris, J. 1994. Leguane Gattung *Cyclura*. Situationsbericht Dominikanische Republik. Wien (= Vienna).
- Gray, J.E. 1845. Catalogue of the Specimens of Lizards in the Collections of the British Museum. Trustees of the British Museum, London.
- Henderson, R.W. and A. Schwartz. 1984. A guide to the identification of the amphibians and reptiles of Hispaniola. *Milwaukee Pub. Mus. Spec. Publ. Biol. Geol.* (4):1–70.
- , —, and S.J. Incháustegui. 1984. Guía para la identificación de los anfibios y reptiles de la Hispaniola. *Mus. Nac. Hist. Nat. Ser. Monogr.* (1):1–128.
- Hoppe, J. 1989. Los Parques Nacionales de la República Dominicana. The National Parks of the Dominican Republic. Edit. Corripio, Santo Domingo.
- Iverson, J.B. 1980. Colic modifications in iguanine lizards. *J. Morphol.* 163:79–93.
- . 1982. Adaptations to herbivory in iguanine lizards, p. 60–76. *In* G.M. Burghardt and A.S. Rand (eds.), *Iguanas of the World: Their Behavior, Ecology, and Conservation*. Noyes Publ., Park Ridge, New Jersey.
- Ma, P.F. and J.R. Fisher. 1971. Comparative studies of reptilian and avian adenosine deaminases. *Comp. Biochem. Physiol.* 39B:969–977.
- Noble, G.K. 1923. Trailing the Rhinoceros Iguana. *Nat. Hist.* 23:541–558.
- Ottenwalder, J.A. 1979. International Zoo News Santo Domingo, Dominican Republic. *Internatl. Zoo News* 26(1):41–43.
- . 1994a. Programa de fauna nativa de Hispaniola: reproducción en cautiverio y conservación de iguanas *Cyclura* en el Parque Zoológico Nacional de la República Dominicana. *Rep. Invest. Zoodom* No. 2. Santo Domingo.
- . 1994b. Iguanid camp taxon report: *Cyclura ricordi*, p. 74–75. *In* R. Hudson, A. Alberts, S. Ellis, and O. Byers (eds.), *Conservation Assessment and Management Plan for Iguanidae and Varanidae*. Working document. Report from a workshop held 1–3 September 1992. IUCN/SSC Conservation Breeding Specialist Group, Apple Valley, Minnesota.
- Powell, R., R.W. Henderson, K. Adler, and H.A. Dundee. 1996. An annotated checklist of West Indian amphibians and reptiles, p. 51–93. *In* R. Powell and R.W. Henderson (eds.), *Contributions to West Indian Herpetology: A Tribute to Albert Schwartz*. SSAR Contrib. Herpetol. No. 12, Ithaca, New York.
- Sanley Castro, C., and J. Duval. 1979. Reproducción en cautividad de iguanas del género *Cyclura*. *Zoodom, Rev. Parq. Zool. Nac.*, Santo Domingo 3(2):13–18.
- Schwartz, A. 1980. The herpetogeography of Hispaniola, West Indies. *Stud. Fauna Curaçao Carib. Isl.* 61:86–127.
- and M. Carey. 1977. Systematics and evolution in the West Indian iguanid genus *Cyclura*. *Stud. Fauna Curaçao Carib. Isl.* 53:15–97.
- and R.W. Henderson. 1985. A Guide to the Identification of the Amphibians and Reptiles of the West Indies exclusive of Hispaniola. Milwaukee Pub. Mus., Milwaukee, Wisconsin.
- and —. 1988. West Indian amphibians and reptiles: a checklist. *Milwaukee Pub. Mus. Contrib. Biol. Geol.* (74):1–264.
- and —. 1991. Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History. Univ. Florida Press, Gainesville.
- and R. Thomas. 1975. A check-list of West Indian amphibians and reptiles. *Carnegie Mus. Nat. Hist. Spec. Publ.* (1):1–216.
- SEA/DVS (Secretaría de Estado de Agricultura/Departamento de Vida Silvestre). 1990a. La Diversidad Biológica en la República Dominicana: Reporte preparado por el Servicio Alemán de Cooperación Social-Técnica y Fondo Mundial para la Naturaleza (WWF-US). Secretaría de Estado de Agricultura, SURENA/DVS, Santo Domingo.
- . 1990b. La Diversidad Biológica en la República Dominicana: Reporte preparado por el Servicio Alemán de Cooperación Social-Técnica y Fondo Mundial para la Naturaleza (WWF-US). Apéndice. Secretaría de Estado de Agricultura, SURENA/DVS, Santo Domingo.
- Slavens, F.L. and K. Slavens. 1992. Reptiles and Amphibians in Captivity: Breeding-Longevity and Inventory. Slaveware, Seattle, Washington.
- and —. 1993. Reptiles and Amphibians in Captivity: Breeding-Longevity and Inventory. Slaveware, Seattle, Washington.
- Valdez Sierra, G. and J.M. Mateo Félix. 1992. Sistema de Areas Protegidas de República Dominicana. Fondo Pro-naturaleza, Santo Domingo.
- Vifias Roman, J.A. 1979. Ecological distribution of Dominican iguanas. *Internatl. Zoo News* 26(3):6–9.
- Wiewandt, T.A. 1982. Evolution of nesting patterns in iguanine lizards, p. 119–141. *In* G.M. Burghardt and A.S. Rand (eds.), *Iguanas of the World: Their Behavior, Ecology, and Conservation*. Noyes Publ., Park Ridge, New Jersey.

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